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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,073	08/15/2001	Goran Mork	CISCP697	2891
26541	7590	08/23/2005	EXAMINER	
Cindy S. Kaplan P.O. BOX 2448 SARATOGA, CA 95070			PHAN, HANH	
			ART UNIT	PAPER NUMBER
			2638	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/931,073	<b>Applicant(s)</b> MORK ET AL.	
	<b>Examiner</b> Hanh Phan	<b>Art Unit</b> 2638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature **“adding the spread spectrum signal to the payload data signal to form a modulation signal and applying the modulation signal to input of an optical modulator that modulates the optical signal ”** specified in claim 2 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 2, 13 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

-Regarding claims 2, 13 and 24, the phrase **"adding the spread spectrum signal to the payload data signal to form a modulation signal and applying the modulation signal to input of an optical modulator that modulates the optical signal"** was not described in the specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 12-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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-Regarding claim 12, claim 12 claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. See In Ex part Lyell, 17 USPQ2c 1548 (Bd. Pat. App. & Inter. 1990) and see MPEP 2173.05(p) section II.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 4-7, 12, 15-18, 23 and 26-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Roberts (US Patent No. 5,513,029).

Regarding claims 1, 12 and 23, referring to Figure 2, Roberts teaches in an optical communication transmitter system, a method for superimposing utility data on an optical signal, the method comprising:

receiving utility data (i.e., a dither signal, Fig. 2) from a utility data source;

spreading the utility data according to a spreading code to generate a spread spectrum signal (i.e., a dither signal encoded with a pseudo random code); and

modulating (i.e., external modulator 1524, Fig. 2) the optical signal with a combination of the spread spectrum signal and a signal carrying payload data (see col. 7, lines 15-59).

Regarding claims 4, 15 and 26, Roberts further teaches driving a laser using the spread spectrum signal and modulating output of the laser using the payload data signal (Fig. 2).

Regarding claims 5-7, 16-18 and 27-29, Roberts further teaches the utility data comprises a signal strength indication (i.e., a dither signal, Fig. 2).

8. Claims 1-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Dawson et al (US Patent No. 5,416,623).

Regarding claims 1, 12 and 23, referring to Figures 1-3, Dawson teaches in an optical communication transmitter system, a method for superimposing utility data on an optical signal, the method comprising:

receiving utility data (i.e., a test sequence signal, Fig. 1) from a utility data source;

spreading the utility data according to a spreading code to generate a spread spectrum signal (i.e., PRBS pulses, Fig. 1); and

modulating (i.e., optical transmitter 3, Fig. 1) the optical signal with a combination of the spread spectrum signal and a signal carrying payload data (see col. 4, lines 4-67 and col. 5, lines 1-25).

Regarding claims 2, 3, 13, 14, 24 and 25, Dawson teaches all the aspects of the claimed invention except fails to specifically teach adding the spread spectrum signal to the payload data signal to form a modulation signal (Fig. 1).

Regarding claims 4, 15 and 26, Dawson further teaches driving a laser (i.e., optical transmitter 3, Fig. 1) using the spread spectrum signal and modulating output of the laser using the payload data signal.

Regarding claims 5-7, 16-18 and 27-29, Dawson further teaches the utility data comprises a signal strength indication ( Fig. 1).

Regarding claims 8, 19 and 30, referring to Figures 1-3, Dawson teaches in an optical communication receiver (i.e., optical receiver 6, Fig. 1), a method for recovering utility data from an optical signal, the method comprising:

accepting as input an optical signal modulated with payload data and the utility data (as indicated in Fig. 1, accepting as input an optical signal modulated with data input and the test sequence);

multiplying (i.e., a multiplier 16, Fig. 3) an electrical signal derived from the optical signal by a spreading sequence to recover the utility data, the electrical signal carrying both the payload data and the utility data; and

recovering the payload data from the optical signal (see col. 4. lines 1-67 and col. 5, lines 1-25).

Regarding claims 9, 20 and 31, Dawson further teaches wherein in a spectrum of the optical signal as input, modulation due to the utility data and modulation due to the payload data overlap in the frequency domain (see Fig. 1).

Regarding claims 10, 11, 21, 22, 32 and 33, Dawson further teaches wherein the utility data comprises a signal strength indication (Figs. 1-3).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2, 3, 13, 14, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (US Patent No. 5,513,029) in view of Dawson et al (US Patent No. 5,416,623).

Regarding claims 2, 3, 13, 14, 24 and 25, Roberts teaches all the aspects of the claimed invention except fails to specifically teach adding the spread spectrum signal to the payload data signal to form a modulation signal. However, Dawson in US Patent No. 5,416,623 teaches adding the spread spectrum signal to the payload data signal to form a modulation signal (see Fig. 1, col. 4, lines 1-67 and col. 5, lines 1-25). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the adding the spread spectrum signal to the payload data signal to form a modulation signal as taught by Dawson in the system of Roberts. One of ordinary skill in the art would have been motivated to do this since Dawson suggests in column 4, lines 1-67 and col. 5, lines 1-25 that using such the adding the spread spectrum signal to the payload data signal to form a modulation signal have advantage of allowing a pseudo random code is used to broaden the emission spectrum of laser in the optical transmitter to reduce non-linear optical effects



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and to transmit communications and control information between nodes on an optical network.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571)272-3078. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

  
**HANH PHAN**  
**PRIMARY EXAMINER**